



Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

1 The diagram below shows a **growth response** in a plant. This growth response results from the

- A conversion of mechanical energy into radiant energy
- B action of contractile fibers
- C conversion of light energy into heat energy
- D action of plant hormones



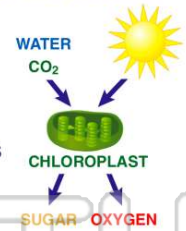
3 Which process in plants is **not controlled by hormones**?

- A transport of glucose downward in stems
- B production of flowers
- C development of seeds



2 The use of CO<sub>2</sub> and H<sub>2</sub>O by a geranium plant to **synthesize glucose** illustrates the process of

- A autotrophic nutrition
- B heterotrophic nutrition
- C protein production
- D carbohydrate hydrolysis



4 A farmer found that one tree in his pear orchard produced especially delicious fruit. Which **method** would most quickly provide a large crop of these pears?

- A planting seeds of the pears from this tree
- B crossing this tree with another tree in the orchard
- C providing the tree with a special



5



## PREVIEW

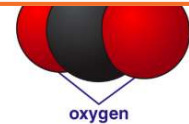
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7

- C coelenterate
- D tracheophyte



- B asexual reproduction
- C active transport
- D autotrophic nutrition



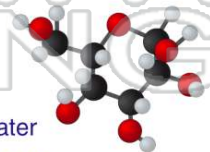
9

Plants in areas with short growing seasons often have **more chloroplasts** in their cells than plants in areas with longer growing seasons. Compared to plants in areas with longer growing seasons, plants in areas with **shorter growing seasons** most likely

- A make and store food more quickly
- B have a higher rate of protein metabolism
- C grow taller
- D have a different method of respiration

10 In plants, **simple sugars** are least likely to be

- A linked together to form proteins
- B broken down into carbon dioxide and water
- C used as a source of energy
- D stored in the form of starch molecules





## ANSWER KEY

The diagram below shows a **growth response** in a plant. This growth response results from the

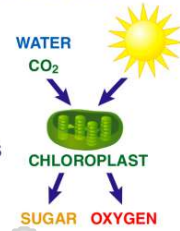
- A conversion of mechanical energy into radiant energy
- B action of contractile fibers
- C conversion of light energy into heat energy
- D action of plant hormones



(d)

The use of  $\text{CO}_2$  and  $\text{H}_2\text{O}$  by a geranium plant to **synthesize glucose** illustrates the process of

- A autotrophic nutrition
- B heterotrophic nutrition
- C protein production
- D carbohydrate hydrolysis



(a)

Which process in plants is **not controlled by hormones**?

- A transport of glucose downward in stems
- B production of flowers
- C development of seeds
- D growth of stem tips toward light



(a)

A farmer found that one tree in his pear orchard produced especially delicious fruit. Which **method** would most quickly provide a large crop of these pears?

- A planting seeds of the pears from this tree
- B crossing this tree with another tree in the orchard
- C providing the tree with a special fertilizer containing minerals
- D grafting branches from this tree onto other trees



(d)



## PREVIEW

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Plants in areas with short growing seasons often have **more chloroplasts** in their cells than plants in areas with longer growing seasons. Compared to plants in areas with longer growing seasons, plants in areas with **shorter growing seasons** most likely

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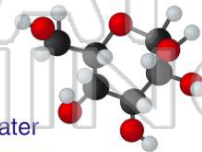
(a)

- D autotrophic nutrition

oxygen

In plants, **simple sugars** are least likely to be

- A linked together to form proteins
- B broken down into carbon dioxide and water
- C used as a source of energy
- D stored in the form of starch molecules



(a)